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NOTICE OF ALLOWANCE AND FEE(S) DUE

22801 7590 06/04/2009

LEE & HAYES, PLLC
601 W. RIVERSIDE AVENUE
SUITE 1400
SPOKANE, WA 99201

EXAMINER	
CHEN, QING	
ART UNIT	PAPER NUMBER
2191	

DATE MAILED: 06/04/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,503	03/08/2004	Samuel Amin	MS1-1850US	3026

TITLE OF INVENTION: MANAGING TOPOLOGY CHANGES IN MEDIA APPLICATIONS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1510	$300	$0	$1810	09/04/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

22801 7590 06/04/2009

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Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,503	03/08/2004	Samuel Amin	MS1-1850US	3026

TITLE OF INVENTION: MANAGING TOPOLOGY CHANGES IN MEDIA APPLICATIONS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1510	$300	$0	$1810	09/04/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
CHEN, QING	2191	717-120000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:

❑ Issue Fee

❑ Publication Fee (No small entity discount permitted)

❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**

❑ A check is enclosed.

❑ Payment by credit card. Form PTO-2038 is attached.

❑ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

❑ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

❑ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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EXAMINER	
CHEN, QING	
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DATE MAILED: 06/04/2009

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 485 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 485 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

Notice of Allowability	Application No.	Applicant(s)	
	10/796,503	AMIN ET AL.	
	Examiner	Art Unit	
	Qing Chen	2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *the amendment filed on March 2, 2009*.

2. ☒ The allowed claim(s) is/are *1-6,8-25 and 27-29, renumbered as 1-27*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 20090302, 20090331, 20090520
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

1. This Office action is in response to the amendment filed on March 2, 2009, entered by the RCE filed on March 31, 2009.

2. **Claims 1-6, 8-25, and 27-29** are pending.

3. **Claims 1, 6, 9-14, 20-25, 27, and 29** have been amended.

4. **Claims 7 and 26** have been canceled.

5. **Claims 1-6, 8-25, and 27-29** are allowed, renumbered as 1-27.

6. The objections to Claims 1-6 and 8-19 are withdrawn in view of Applicant's amendments to the claims.

7. The provisional nonstatutory obviousness-type double patenting rejections of Claims 10, 11, 14-16, and 19 over copending Application No. 10/796,505 are withdrawn in view of the approval of the submitted terminal disclaimer.

8. The 35 U.S.C. § 112, second paragraph, rejections of Claims 1-6, 8, 9, and 20-28 are withdrawn in view of Applicant's amendments to the claims. The 35 U.S.C. § 112, second paragraph, rejection of Claim 29 is withdrawn in view of Examiner's amendments to the claim.

9. The 35 U.S.C. § 101 rejections of Claims 1-6, 8, and 9 are withdrawn in view of Applicant's amendments to the claims.

Continued Examination Under 37 CFR 1.114

10. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been

timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 2, 2009 has been entered.

Terminal Disclaimer

11. The terminal disclaimer filed on May 20, 2009 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent granted on Application Number 10/796,505 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Examiner's Amendment

12. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this Examiner's amendment was given in a telephone interview with Dominic S. Lindauer (Reg. No. 61,417) on May 20, 2009.

The application has been amended as follows:

AMENDMENTS TO THE CLAIMS

Please cancel Claim 26 and amend Claims 1, 6, 10-14, 20-25, 27, and 29 as follows:

1. (Currently Amended) A method of supporting and dynamically managing media pipeline topology changes during a media application session to facilitate seamless presentation of media during dynamic changes, the method comprising:

accessing a highest priority time source as a main presentation clock to which all clock-aware components synchronize;

receiving a partial media pipeline topology that defines how data flows through a plurality of nodes in the partial media pipeline topology including at least a first media source node and at least a first media sink node;

retrieving a cached media pipeline topology when the partial media pipeline topology is not sufficient to permit presentation to further define how data flows through a plurality of nodes in the partial media pipeline topology including at least a second media source node, at least a second media sink node, and at least one transform node;

cloning one or more nodes including state information from the cached media pipeline topology to the partial media pipeline topology during the media application session thus creating a full media pipeline topology to facilitate the seamless presentation of media;

maintaining a data table that correlates one or more decoders or encoders in the cached media pipeline topology with one or more source nodes or destination nodes in the cached media pipeline topology;

associating a source node with a same instance of a decoder and requiring that the same decoder be used if a media source node is re-used in a subsequent topology or a destination node with [[the]] a same instance of an encoder and requiring that the same encoder be used if a media destination node is re-used in a subsequent topology;[[_]]

facilitating the seamless presentation of media by pre-rolling, the pre-rolling comprising receiving data from the first media source node at the first media sink node before the first media sink node starting a presentation clock synchronized with the main presentation clock; and

~~causing~~ executing the seamless presentation of [[the]] media by a computing device.

6. (Currently Amended) The method of claim 1, further comprising cloning a plurality of connected nodes from the cached media pipeline topology ~~into~~ to the partial media pipeline topology.

10. (Currently Amended) A system comprising:

one or more computer-readable storage media; and

a media engine embodied on the one or more computer-readable storage media and configured to communicatively interact with an application to ~~seamlessly present a media~~ facilitate seamless presentation of media:

the media engine being configured to [[use]] communicatively interact with the application to facilitate the seamless presentation of media by using:

~~a time source as a main presentation clock to which all clock-aware components synchronize;~~

~~a media session to generate a partial media topology, the partial media topology including one or more media sources, individual ones of which serve as a source of media content, and one or more media sinks configured to sink a media stream; and~~

~~a topology loader to resolve the partial media topology into a full media topology, wherein the topology loader is configured to:~~

~~clone one or more nodes including state information from a cached media topology to resolve the full media topology, where the topologies define a flow of data through the nodes; and~~

~~synchronize a presentation clock with the main presentation clock and pre-rolling, the pre-rolling comprising starting the presentation clock after receiving data at a node~~

a highest priority time source as a main presentation clock to which all clock-aware components synchronize;

a media session configured to:

receive a partial media pipeline topology that defines how data flows through a plurality of nodes in the partial media pipeline topology including at least a first media source node and at least a first media sink node; and

retrieve a cached media pipeline topology when the partial media pipeline topology is not sufficient to permit presentation to further define how data flows through a plurality of nodes in the partial media pipeline topology including at least a second media source node, at least a second media sink node, and at least one transform node; and

a topology loader configured to:

clone one or more nodes including state information from the cached media pipeline topology to the partial media pipeline topology during a media

application session thus creating a full media pipeline topology to facilitate the seamless presentation of media;

maintain a data table that correlates one or more decoders or encoders in the cached media pipeline topology with one or more source nodes or destination nodes in the cached media pipeline topology;

associate a source node with a same instance of a decoder and requiring that the same decoder be used if a media source node is re-used in a subsequent topology or a destination node with a same instance of an encoder and requiring that the same encoder be used if a media destination node is re-used in a subsequent topology; and

facilitate the seamless presentation of media by pre-rolling, the pre-rolling comprising receiving data from the first media source node at the first media sink node before the first media sink node starting a presentation clock synchronized with the main presentation clock.

11. (Currently Amended) The system of claim 10, wherein the media session passes the partial media pipeline topology to the topology loader as a parameter in an interface call.

12. (Currently Amended) The system of claim 10, wherein the media session passes the cached media pipeline topology to the topology loader as a parameter in an interface call.

13. (Currently Amended) The system of claim 10, wherein the topology loader is configured to determine whether there are corresponding nodes in the partial media pipeline topology and the cached media pipeline topology.

14. (Currently Amended) The system of claim 10, wherein the topology loader is configured to clone one or more intermediate nodes from the cached media pipeline topology, and to connect the one or more intermediate nodes in a communication path between a media source node and a media sink node in a partial media pipeline topology.

20. (Currently Amended) One or more computer-readable storage media storing computer executable instructions comprising instructions that, when executed on a computer, direct the computer to:

~~receive a partial media topology defined by the flow of data through various components that includes a plurality of nodes including at least a first media source node and at least a first media sink node;~~

~~access a time source as a main presentation clock to which all clock-aware components synchronize;~~

~~retrieve a cached media topology that includes a plurality of nodes including at least a second media source node, at least a second media sink node, and at least one transform node;~~

~~clone one or more nodes including state information from the cached media topology to a fully resolved media topology; and~~

~~pre-roll by starting a presentation clock synchronized with the main presentation clock after receiving data at the first media sink node~~

access a highest priority time source as a main presentation clock to which all clock-aware components synchronize;

receive a partial media pipeline topology that defines how data flows through a plurality of nodes in the partial media pipeline topology including at least a first media source node and at least a first media sink node;

retrieve a cached media pipeline topology when the partial media pipeline topology is not sufficient to permit presentation to further define how data flows through a plurality of nodes in the partial media pipeline topology including at least a second media source node, at least a second media sink node, and at least one transform node;

clone one or more nodes including state information from the cached media pipeline topology to the partial media pipeline topology during a media application session thus creating a full media pipeline topology to facilitate seamless presentation of media;

maintain a data table that correlates one or more decoders or encoders in the cached media pipeline topology with one or more source nodes or destination nodes in the cached media pipeline topology;

associate a source node with a same instance of a decoder and requiring that the same decoder be used if a media source node is re-used in a subsequent topology or a destination node with a same instance of an encoder and requiring that the same encoder be used if a media destination node is re-used in a subsequent topology;

facilitate the seamless presentation of media by pre-rolling, the pre-rolling comprising receiving data from the first media source node at the first media sink node before the first media sink node starting a presentation clock synchronized with the main presentation clock; and

execute the seamless presentation of media.

21. (Currently Amended) The one or more computer-readable storage media of claim 20, wherein the partial media pipeline topology is received from a remote process as a parameter in an interface call.

22. (Currently Amended) The one or more computer-readable storage media of claim 20, wherein the cached media pipeline topology is retrieved as a parameter in an interface call.

23. (Currently Amended) The one or more computer-readable storage media of claim 20, further comprising computer executable instructions that, when executed on a computer, direct the computer to determine whether there are corresponding nodes in the partial media pipeline topology and the cached media pipeline topology.

24. (Currently Amended) The one or more computer-readable storage media of claim 20, further comprising computer executable instructions that, when executed on a computer, direct the computer to transfer the at least one transform node from the cached media pipeline topology to the partial media pipeline topology.

25. (Currently Amended) The one or more computer-readable storage media of claim 20, further comprising computer executable instructions that, when executed on a computer, direct the computer to clone a plurality of connected nodes from the cached media pipeline topology ~~into~~ to the partial media pipeline topology.

26. (Canceled)

27. (Currently Amended) The one or more computer-readable storage media of claim 20, further comprising computer executable instructions that, when executed on a computer, direct the computer to connect one or more nodes in the partial media pipeline topology.

29. (Currently Amended) A topology loader module comprising computer executable instructions stored in computer-readable storage media that, when executed by a computer, provide:

~~means for receiving a partial media topology that defines how data flows through a plurality of nodes including at least a first media source node and at least a first media sink node;~~

~~means for synchronizing all clock-aware nodes to a main presentation clock which uses a highest priority time source;~~

~~means for retrieving a cached media topology that defines how data flows through a plurality of nodes including at least a second media source node, at least a second media sink node, and at least one transform node;~~

~~means for associating the nodes with a same instance of their encoder or decoder and requiring a same encoder or decoder be re-used in a subsequent topology;~~

~~means for cloning one or more nodes including state information from the cached media topology to a fully resolved media topology; and~~

~~means for seamless presentation of media using the fully resolved media topology by receiving data from the first media source node before starting a presentation clock synchronized with the main presentation clock~~

means for accessing a highest priority time source as a main presentation clock to which all clock-aware components synchronize;

means for receiving a partial media pipeline topology that defines how data flows through a plurality of nodes in the partial media pipeline topology including at least a first media source node and at least a first media sink node;

means for retrieving a cached media pipeline topology when the partial media pipeline topology is not sufficient to permit presentation to further define how data flows through a plurality of nodes in the partial media pipeline topology including at least a second media source node, at least a second media sink node, and at least one transform node;

means for cloning one or more nodes including state information from the cached media pipeline topology to the partial media pipeline topology during a media application session thus creating a full media pipeline topology to facilitate seamless presentation of media;

means for maintaining a data table that correlates one or more decoders or encoders in the cached media pipeline topology with one or more source nodes or destination nodes in the cached media pipeline topology;

means for associating a source node with a same instance of a decoder and requiring that the same decoder be used if a media source node is re-used in a subsequent topology or a destination node with a same instance of an encoder and requiring that the same encoder be used if a media destination node is re-used in a subsequent topology;

means for facilitating the seamless presentation of media by pre-rolling, the pre-rolling comprising receiving data from the first media source node at the first media sink node before the first media sink node starting a presentation clock synchronized with the main presentation clock; and

means for executing the seamless presentation of media.

-- END OF AMENDMENT --

Reasons for Allowance

13. The following is an Examiner's statement of reasons for allowance:

The cited prior art taken alone or in combination fail to teach, in combination with the other claimed limitations, "accessing a highest priority time source as a main presentation clock to which all clock-aware components synchronize; and facilitating the seamless presentation of media by pre-rolling, the pre-rolling comprising receiving data from the first media source node at the first media sink node before the first media sink node starting a presentation clock synchronized with the main presentation clock" as recited in independent Claim 1; and further fail to teach, in combination with the other claimed limitations, similarly-worded limitations recited in independent Claims 10, 20, and 29.

The closest cited prior art, the combination of US 6,725,279 (hereinafter "Richter"), US 5,878,431 (hereinafter "Potterveld"), and US 2004/0004631 (hereinafter "Debique"), teaches a multimedia processing system architecture performing a plurality of multimedia tasks on multimedia data using a plurality of multimedia processing blocks. However, the combination of Richter, Potterveld, and Debique fails to teach "accessing a highest priority time source as a main presentation clock to which all clock-aware components synchronize; and facilitating the seamless presentation of media by pre-rolling, the pre-rolling comprising receiving data from the first media source node at the first media sink node before the first media sink node starting a presentation clock synchronized with the main presentation clock" as recited in independent Claim 1; and further fails to teach similarly-worded limitations recited in independent Claims 10, 20, and 29.

Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

15. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Qing Chen whose telephone number is 571-270-1071. The

Examiner can normally be reached on Monday through Thursday from 7:30 AM to 4:00 PM. The Examiner can also be reached on alternate Fridays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wei Zhen, can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Q. C./

Examiner, Art Unit 2191

/Wei Y Zhen/

Supervisory Patent Examiner, Art Unit 2191